GP2734

Lou 13-13

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Hui-Ling Lou et al.
Case: 13-13
Serial No.: 09/390,389
Filing Date: September 3, 1999
Title: Multiplier-Free Methods and Apparatus for Signal Processing in a Digital Communication System
Group: 2734
Examiner: To Be Assigned

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants' attorney wishes to bring to the attention of the Patent and Trademark Office the following documents listed on the accompanying Form PTO-1449. A copy of each listed document is enclosed.

1. T.A.C.M. Claasen et al., "Comparison of the Convergence of Two Algorithms for Adaptive FIR Digital Filters," IEEE Trans. on Acoustics, Speech and Signal Processing, Vol. ASSP-29, No. 3, pp. 670-678, June 1981.

2. D.L. Duttweiler, "A Twelve-Channel Digital Echo Canceler," IEEE Trans. on Communications, Vol. COM-26, No. 5, pp. 647-653, May 1978.

3. R.D. Gitlin et al., "On the Design of Gradient Algorithms for Digitally Implemented Adaptive Filters," IEEE Trans. on Circuit Theory, Vol. CT-20, No. 2, pp. 125-136, March 1973.

4. M.D. Meyer et al., "A Modular Pipelined Implementation of a Delayed LMS Transversal Adaptive Filter," Proc. of ISCAS, New Orleans, pp. 1943-1946, 1990.

5. P. Kabal, "The Stability of Adaptive Minimum Mean Square Error Equalizers Using Delayed Adjustment," IEEE Trans. on Communications, Vol. COM-31, No. 3, pp. 430-432, March 1983.

6. G. Long et al., "The LMS Algorithm with Delayed Coefficient Adaptation," IEEE Trans. on Acoustics, Speech and Signal Processing, Vol. 37, No. 9, pp. 1397-1405, September 1989.

7. G. Long et al., "Corrections to 'The LMS Algorithm with Delayed Coefficient Adaptation'," IEEE Trans. on Signal Processing, Vol. 40, No. 1, pp. 230-232, January 1992.

8. M. Rupp et al., "Analysis of LMS and NLMS Algorithms with Delayed Coefficient Update Under the Presence of Spherically Invariant Processes," IEEE Trans. on Signal Processing, Vol. 42, No. 3, pp. 668-672, March 1994.

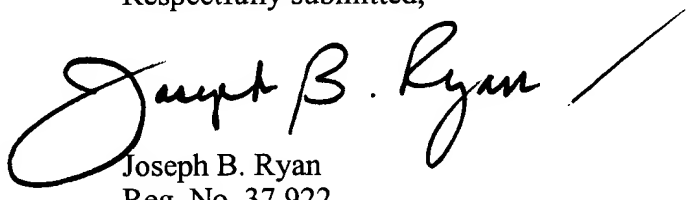
9. E. Bjarnason, "Active Noise Cancellation Using a Modified Form of the Filtered-X LMS Algorithm," Proc. Eusipco Signal Processing VI, Brüssel, pp. 1053-1056, 1992.

10. T. Kimijima et al., "A Pipelined Architecture for DLMS Algorithm Considering Both Hardware Complexity and Output Latency," Proc. Eusipco, Patras, Greece, pp. 503-506, September 1998.

It is believed that there is no fee due in conjunction with the filing of this Information Disclosure Statement. In the event of non-payment or improper payment of a required fee, the Commissioner is authorized to charge or to credit **Lucent Technologies Deposit Account No. 12-2325** as required to correct the error.

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, or as an admission that the information cited is considered to be material to patentability, or as a representation that no other material information exists.

Respectfully submitted,



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